

WHAT IS CLAIMED:

1. A connector for eyeglasses, for connecting one or more earstems to a lens, said connector comprising:
5 a main body with a lateral end and a medial end;
a lens receiving channel extending from the medial end in the direction of the lateral end;
10 a first interlock structure in the lateral end of the channel; and
a second interlock structure spaced apart from the lateral end of the channel.

15 2. A connector for eyeglasses as in Claim 1, wherein the first interlock structure comprises a locking surface for engaging a corresponding locking surface on a lens for resisting vertical upward motion of the lateral end of the connector with respect to the lens.

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20 3. A connector for eyeglasses as in Claim 2, wherein the locking surface on the first interlock structure comprises a ramped edge of a projection on the connector.

25 4. A connector for eyeglasses as in Claim 3, wherein the projection is integrally molded on the connector and extends within the channel in the medial direction.

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30 5. A connector for eyeglasses as in Claim 4, wherein the second interlock structure comprises a locking surface for releasably engaging a corresponding locking surface on the lens.

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35 6. A connector for eyeglasses as in Claim 5, wherein the second interlock structure comprises a projection within the channel for engaging a recess in the lens.

35 7. A connector for eyeglasses as in Claim 6, wherein the second interlock structure comprises first and second projections on the connector extending toward each other from opposite sides of the channel.

Sub B2

35 8. A connector for eyeglasses as in Claim 1, wherein the second interlock structure comprises a recess in the channel for receiving a projection on the lens.

6. 9. An eyeglass, comprising a lens, an earstem, and at

least one connector as defined in Claim 1 for removably connecting the earstem to the lens.

Sub B3

10. An eyeglass as in Claim 9, wherein the lens comprises a connector contacting surface having a projection at a lateral point thereon and a recess at a medial point thereon.

11. Sunglasses, comprising:
a unitary transparent lens adapted to extend in a curved pane in the path of the wearer's left and right

10 eye fields of vision;

at least one connector extending along a portion of an edge of the lens, the connector having an elongated slot formed therein to removably receive a portion of the edge of the lens;

15 at least one projection on the lens to interlock with a recess on the connector at a first end thereof; and

20 a locking surface on the connector, spaced apart from the recess, for releasably engaging a locking surface on the lens.

12. A sunglass as in Claim 11, further comprising a second connector releasably secured to the lens.

13. A ^{eyeglass} as in Claim 9, further comprising an earstem pivotally secured to the connector.

25 14. A sunglass as in Claim 11, wherein the connector extends no more than about one-third of the way across the top edge of the lens.

30 15. A sunglass as in Claim 14, wherein the connector extends no more than about one-fifth of the way across the top edge of the lens.

16. A sunglass as in Claim 11, wherein the connector extends along at least a portion of the lateral edge of the lens.

35 17. A sunglass as in Claim 11, wherein the connector extends along at least a portion of the bottom edge of the lens.

18. A method of removably securing an earstem to a lens in a pair of eyeglass of the type having a right and left lens region, a nose piece and right and left earstem, in which the right and left lens regions are generally defined by a horizontal axis which extends from side to side through the left and right lens regions and which is longer than a vertical axis which extends generally perpendicular to said horizontal axis, said method comprising the steps of:

5 providing a lens having a first and a second interlock structure thereon;

10 providing a connector having a slot therein for receiving the lens, said connector having a first and second interlock structure;

15 advancing the connector along the horizontal axis until the first interlock structure of the connector is in contact with the first interlock structure on the lens; and

20 thereafter rotating the second interlock structure of the connector downward generally along the vertical axis until the second interlock structure on the connector engages the second interlock structure on the lens.

25 19. A method as in Claim 18, wherein the first interlock structures comprise a projection on at least one of the lens and the connector for extending within a recess on the other of the lens and connector.

30 20. A method as in Claim 18, wherein said second interlock structure comprise a projection on one of the lens and the connector and a recess on the other of the lens and connector.

21. A method as in Claim 18, further comprising the step of installing a second connector on the lens.

35 22. A partial upper frame for eyeglasses, of the type adapted to extend along a portion of the upper edge of a unitary eyeglass lens, said partial frame comprising:

a slot on the lower portion thereof for receiving

a portion of the lens;

a recess within the slot for receiving a projection on the lens to provide a rotational pivot point of the connector with respect to the lens; and

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a lock on the connector for releasably securing the connector to the lens;

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wherein the connector is adapted for mounting on the lens by advancing the projection on the lens into the recess on the connector and thereafter rotating the connector about the contact surface between the projection and the recess so that the lock on the connector engages a complementary surface structure on the lens for releasably retaining the connector on the lens.

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23. A lens for eyeglasses, said lens adapted for mounting on the face of a wearer by means of an opposing pair of earstem connectors having lens receiving portions and a pair of earstems, said lens being suitable for participation in active sports, such as biking, skiing and the like, said 20 lens comprising:

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a unitary pane having an upper edge and a lower edge, said lower edge having a nose piece opening formed therein for mounting said lens on the nose of the wearer, thereby cooperating with said lens connectors and said earstems for mounting the eyeglasses on the head of the wearer, said upper edge of said lens having a connector engaging surface on each lateral end thereof,

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said nose piece opening having an upper extremity, the distance separating the upper extremity of the nose piece and the upper edge of the pane being defined as D1, and the distance separating the upper edge of the pane and the lower edge of the pane being defined as D2, wherein D1 is in the range between about 1/2 inch and 1-3/4 inches, and D2 is in the range of from about 1-1/4 inches to 2-3/4 inches,

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5 said lens having an arcuate cross-sectional configuration along a horizontal axis from a first lateral end to a second lateral end, wherein the arc length of the lens is in the range of from about 5-1/2 inches to about 7 inches,

10 said lens having a lateral interlock structure in the upper lateral region of the lens and a medial interlock structure spaced apart from the lateral interlock structure along the top edge of the lens by no more than about one-half of the arc length of the lens.

15 24. A lens for eyeglasses as in Claim 23, wherein the lateral interlock structure and the medial interlock structure are spaced apart by no more than about one-third of the arc length of the lens.

20 25. A lens for eyeglasses as in Claim 23, wherein the lateral interlock structure and the medial interlock structure are spaced apart by no more than about one-fifth of the arc length of the lens.

25 26. A lens for eyeglasses as in Claim 23, wherein the lateral interlock structure comprises a projection on the lens extending in a lateral direction therefrom for engaging a recess in the lens connector.

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